# APPENDIX A

UNITED STATES DISTRICT COURT
District of Massachusetts

Civil Action
No. 58-1222-C

PLYMOUTH RUBBER COMPANY, INC.,
*Plaintiff*

v.

MINNESOTA MINING and MANUFACTURING COMPANY,
*Defendant*

## *OPINION*

March 23, 1962

CAFFREY, *D.J.*

This an action brought under 28 U.S.C.A. 2201, 2202, in which Plymouth Rubber Company, Inc. seeks declaratory relief against Minnesota Mining and Manufacturing Company. Plaintiff seeks a determination that Minnesota's Oace Reissue Patent, No. 23,843, is not infringed by "Slipknot," plastic electrical insulating tape manufactured and sold by Plymouth, and, also, requests an injunction against Minnesota's bringing or threatening to bring any additional suits against Plymouth or any of its customers based on the manufacture, use, or sale of Slipknot tape by Plymouth or by any of its customers.

In its answer Minnesota asserts that its Oace patent was duly and lawfully issued, is valid, and that Plymouth has infringed and is continuing to infringe same. Minne-

sota also says that the tape in issue here is different from a tape previously determined to be non-infringing in earlier litigation between the same parties which resulted in the entry of a judgment in Plymouth's favor with respect to the tape there in issue.

Minnesota's answer also includes a counterclaim against Plymouth, a prayer for an accounting to establish Minnesota's damages resulting from the alleged infringement, and a prayer for a permanent injunction restraining Plymouth from further infringement.

Plymouth filed a reply to Minnesota's counterclaim in which it challenges the validity of the reissue patent. Thereafter, Judge McCarthy allowed Minnesota's motion to strike so much of Plymouth's reply to the counterclaim as put in issue the validity of the Oace reissue patent, on the ground that the patent had been held to be valid in an earlier case. (See 185 F.Supp. 716.) At the trial of this case I declined to review Judge McCarthy's allowance of the motion to strike, despite urgings of Plymouth's counsel that I do so, since I am persuaded that it is not the proper function of one district judge to review rulings made by another member of the same Court at an earlier stage of a pending case. Any rights that Plymouth may have by reason of my declining to reconsider this matter are expressly saved for purposes of appeal.

At the trial each party produced several chemical experts, all duly qualified to express opinions on the various chemical problems presented by this case. Because of the extensive litigation which has already taken place between these two parties with respect to this particular patent, I do not find it necessary to analyze this expert testimony in fine detail or at length.

For present purposes the most important case in this litany of litigation[1] is the so-called "*Sears*" case, which

[1] In addition to the *Sears* case, the following cases are among those which have been reported:

*Minnesota* v. *Plymouth* (and Hawkins Electric Company, Complete Electrical Supply Co., and Shumway-Fresen Co.),

was filed on August 3, 1954, by Minnesota against Sears, Roebuck & Company, in the Middle District of North Carolina. Plymouth intervened in that case and openly and actively defended on behalf of its customer, Sears, Roebuck. The District Court ruled that Minnesota's Oace patent was valid and was infringed by the tape which Plymouth was making at that time. Its opinion is reported in 141 F.Supp. 686. On appeal the Court of Appeals for the Fourth Circuit, in an opinion dated April 1, 1957 (243 F.2d 136), reversed and vacated the judgment of the District Court. Thereafter, on October 18, 1957, Minnesota's petition for reopening and rehearing was denied (249 F.2d 66), certiorari was denied (355 U.S. 932), and a motion for rehearing the petition for certiorari was denied on March 17, 1958 (356 U.S. 915). Final judgment was entered by the District Court on May 22, 1958, dismissed Minnesota's complaint.

The Court of Appeals for the Fourth Circuit found the Oace patent teaches that a liquid plasticizer must be used

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[1] (Continued)
178 F.Supp. 591 (N.D. Ill., March 27, 1959); (complaint, filed Aug. 4, 1954, dismissed on Plymouth's motion for summary judgment, and Minnesota's motion for leave to file a supplementary complaint denied);

*Minnesota* v. *Superior Insulating Tape Co.*, 124 P.Q. 31 (E.D. Mo.), aff'd. 284 F.2d 478 (8 Cir., Dec. 1, 1960), (complaint, filed Aug. 4, 1954, dismissed on defendant's motion for summary judgment, and Minnesota's motion for leave to file a supplementary complaint denied);

*Minnesota* v. *U.S. Rubber Co.* (and Lowder Hardware Co. and Rockingham Hardware Co.), and v. *Goodyear Tire & Rubber Co.* (and Carolina Tire Co. of Thomasville, N.C.), 178 F. Supp. 385 (M.D.N.C.), aff'd. 279 F. 2d 409 (4 Cir., May 16, 1960), (complaints, filed June 15 and July 5, 1956, dismissed on Plymouth's motions for summary judgment, and Minnesota's motion for leave to file a supplementary complaint denied).

Minnesota also secured default judgment against *Pine State Electric Supply Co.* on complaint filed in M.D.N.C. August 3, 1954. Plymouth was not a party to this case, which involved two tapes, only one of which was made by Plymouth.

together with a resinous plasticizer, such as G-25 or G-40, in order to obtain good results in the manufacture of insulating adhesive tape. The Court specifically rejected the contention made by Minnesota that this patent teaches that the low molecular-weight portions of a resinous plasticizer are equivalent to those of a liquid plasticizer, and ruled that since Plymouth omitted from the production of its tapes the liquid plasticizer element, as specified in the claims of the patent, there could be no infringement of the patent even though the same results were obtained. The Court refused to apply the doctrine of equivalents because it was satisfied that one element required by the Oace patent, namely the liquid plasticizer, was not included in Plymouth's product.

In still another phase of this apparently interminable multi-facet litigation, the Court of Appeals for the Eighth Circuit construed the Sears decision as holding that "plaintiff's patent teaches that the plasticizer of the tape must consist of two elements, one liquid and one resinous, and that the Plymouth product did not infringe because its plasticizer contained only the resinous element and not the liquid element."

Minnesota contends herein that Slipknot is a different tape from that involved in the *Sears* case and that Slipknot infringes the Oace reissue patent because of an alleged change in the composition of G-25 and G-40. Minnesota says that subsequent to August 3, 1954, G-25 and G-40 have been materially changed so that they now contain, in effect, the elements of a liquid plasticizer as that term is used in the Oace patent. Minnesota does not attempt to prove this by any direct evidence tending to establish a change in the raw materials from which G-25 and G-40 are manufactured, nor by any direct evidence of a change in the process used to manufacture G-25 and G-40. Minnesota seeks to prove that a change occurred by offering in evidence the results of certain fractionation tests made by its experts upon substances extracted by these experts from samples of Slipknot tape.

I am persuaded and accordingly I find that Plymouth's Slipknot tape, brought onto the market under that trade name in December 1957, is made in the same way and from the same materials as the Plymouth tape ruled to be non-infringing by the Court of Appeals for the Fourth Circuit in the *Sears* case. I base this finding primarily, but by no means exclusively, on the testimony of Dr. Ellington M. Beavers, Assistant Director of Research for Rohm & Haas Company, the chemical concern which manufactures Paraplex G-25 and Paraplex G-40. Dr. Beavers took part in the development of G-25 and G-40. He testified that prior to the commercial marketing of either of these resinous polymeric plasticizers, definite specifications were developed for the manufacture of each, and he testified explicitly that there has been no change in the specifications of G-25 since August 3, 1954, and that there have been no significant changes in the manufacturing processes of either plasticizer since that time.[2]

He further testified that the acid number specification has remained a maximum of 2 for each product; that the raw materials used for each have remained the same; that the production control methods have remained the same; that the products have continued to be as uniform as is possible; and that Rohm & Haas Company is selling today[3] the same products as G-25 and G-40 as it did on or before August 3, 1954.

Dr. Beavers' testimony was followed by testimony from Morris M. Danovitch, Chief Chemist for Plymouth's tape and cable division, to the effect that he was responsible for the formulation of Plymouth's plastic electrical tape. He stated, in substance, that there had been no change in Plymouth's method of manufacture since prior to August 3, 1954. He further testified that all formulas specify

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[2] This testimony is corroborated in part by Defendant's Exhibit A, a letter written on December 29, 1954 on behalf of Rohm & Haas Company, in which it was stated that there has been no significant change in these resinous plasticizers.

[3] March 10, 1961 was the date of this testimony.

that G-40 or G-25 be used as the sole plasticizer in the manufacture of Slipknot tape. This witness was followed by Solomon C. DeJong, foreman of Plymouth's calender room, who testified that the materials used in the actual making of Slipknot were mixed in strict accordance with Danovitch's formulas.

The testimony of these three witnesses, which dealt directly with the manufacturing and supplying of G-25 and G-40 by Rohm & Haas Company, and the manufacturing of Slipknot tape by Plymouth, was corroborated by evidence from the experimental field. Plymouth produced as its expert Mr. John M. DeBell, who has an impressive background and vast experience in the field of synthetic resins and plastics (indeed, this statement might fairly be made with reference to all the chemical experts who testified at the trial). Mr. DeBell, a former director of research at the Massachusetts Institute of Technology, now is the head of his own consulting laboratory, DeBell & Richardson, which employs over one hundred people and which does extensive consultation and testing work for the major companies in the chemical industry in the United States. He tested both the tape involved in the *Sears* case and the tape involved in this case, and he previously testified as Plymouth's expert during the trial of the *Sears* case. Mr. DeBell stated that his laboratory tests indicated no change in the plasticizer used by Plymouth in the two tapes tested. His tests showed the absence of a liquid plasticizer.

I believe these wifnesses, both because they impressed me as credible and truthful witnesses and because there was no direct challenge to their testimony as to continued identity of raw materials and manufacturing processes. Minnesota's evidence consisted mostly of the results of certain experimental tests conducted by its chemical experts. I do not believe these tests go far enough to require the disbelief of any of the foregoing testimony. The so-called fractionation tests are similar to those upon which Minnesota relied in its motion for rehearing in the *Sears* case and in its motions for leave to file supple-

mentary complaints in other cases cited in footnote No. 1, *supra*.

Minnesota claims the tests show that the low molecular weight fractions of the plasticizer extracted from the backing of Slipknot tape is such as to be either a liquid plasticizer similar to that called for by its Oace patent or sufficiently similar to be an equivalent to it. This is essentially the same argument which Minnesota presented to the Court of Appeals for the Fourth Circuit when it sought reopening of the *Sears* case. That Court specifically rejected this argument by saying:

> ". . . even if the new evidence should demonstrate the alleged change in the composition of G-25, the decision of the Court would necessarily be retained. This is so because G-25, although changed to contain a larger quantity of low molecular weights, would nevertheless be a resinous plasticizer and would not be composed partly of a resinous and partly of a liquid plasticizer in accordance with the teaching of the patent." (249 F.2d 66, 67.)

I, likewise, do not find sufficient merit in the argument presented by Minnesota here to overcome the plaintiff's evidence.

I think it significant that all of Minnesota's experts avoided the use of a distillation test which Mr. DeBell testified was a simple, reliable and objective test for determining the presence of liquid plasticizer, the ingredient which the Court of Appeals for the Fourth Circuit held to be an indispensable element under the teachings of the Oace patent.

Minnesota makes the further contention that when Plymouth brought Slipknot on to the market in 1957 it launched an extensive nationwide advertising campaign heralding Slipknot as its "new" tape. Minnesota says that this advertising should be treated by this Court as an admission that Slipknot was a "different" tape from that sold by Plymouth prior to 1957, and on the basis

of the chemical evidence in the case, Minnesota argues that this "different" tape should be found to be an infringing tape. Plymouth, on the other hand, says that the tape was "new" in the sense that the nationwide advertising program would introduce it to a group of customers 95% of whom were previously unaware that Plymouth manufactured and marketed a plastic electrical insulating tape, that for this reason it was "new" to this 95% of the trade, and that it was also "new" in that the thickness of the particular tape involved had been reduced from 8 to 7 mil.

The evidence shows that Plymouth conducted an elaborate advertising campaign as alleged, and also used the catch line "ZF-90 for total adhesion." This may well have been over-promotion with regard to the degree of newness, and could well be criticized as rather shabby hucksterism on the part of Plymouth's sales promotion personnel. Nevertheless, the use of mysterious and technical-sounding letter-number combinations for supposedly potent ingredients in a wide diversity of products is a matter of everyday experience.* This use of over-exuberant advertising fails to overcome the evidence reviewed in earlier portions of this opinion which satisfies me that the tape involved herein is chemically not different from the tape involved in the *Sears* case.

I find that Plymouth's Slipknot tape is made from the same materials and in the same manner as the tape held to be non-infringing by the Court of Appeals for the Fourth Circuit in the *Sears* case, and I rule that Slipknot does not infringe Oace Reissue Patent, No. 23,843.

There remain two questions, the first of which is whether Plymouth should be granted the injunctive relief

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* A casual reading of the advertising material in the daily papers in any metropolitan area or in any of our national magazines will show that the admen of Madison Avenue are saturating advertising copy with such items as GL-70 and BR-85 in toothpaste, TCP in motor oil, V-7 and VO-5 in hair tonic, AT-7 in soap etc., etc.

it seeks. In the leading case in this area of the law, *Kessler* v. *Eldred*, 206 U.S. 285 (1907), wherein the Supreme Court upheld the granting of an injunction against further suits sought by a party who previously had successfully resisted a charge of patent infringement, the Court said, (at page 289):

> ". . . the question here is whether by bringing a suit against one of Kessler's customers, Eldred has violated the right of Kessler. The effect which may reasonably be anticipated of harassing the purchasers of Kessler's manufactures by claims for damages on account of the use of them, would be to diminish Kessler's opportunities for sale. *No one wishes to buy anything, if with it he must buy a lawsuit.* . . . If rights between litigants are once established by the final judgment of a court of competent jurisdiction, those rights must be recognized in every way, and wherever the judgment is entitled to respect by those who are bound by it." (Emphasis added.)

The language in plaintiff's brief (page 12) aptly describes the instant litigation:

> "The customer cases constitute a story of proliferation of litigation on a single issue, abuse of judicial process, persistent trying of identical issues in different courts, and oppression and harassment unequalled in our experience. We know of nothing quite like it in the reported cases."

Apart from the instant case, which was begun by Plymouth, Minnesota has thus far instigated litigation against Plymouth and 13 of its customers in United States District Courts located in the Fourth, Seventh, and Eighth Circuits. Minnesota has been unsuccessful in every one of these cases in which Plymouth has appeared and defended. Its conduct in connection with this litigation has already been criticized by the Courts of Appeal for the Fourth and Eighth Circuits. The Fourth Circuit criticized the conduct of one Harold J. Kinney, an attorney for Minnesota, who has appeared in substantially

all of these cases, observing, with reference to an affidavit filed by Mr. Kinney in connection with the *U. S. Rubber* case:

> "The Kinney affidavit adds no weight to plaintiff's position. Aside from its impropriety as an effort on the part of an attorney to bolster his client's case by giving factual testimony on his client's behalf, the affidavit is obviously based only on information and belief, derived from Rathmann, and does not represent the testimony of one who has personal knowledge of the essential facts." (279 F.2d 409, 415.)

The Court of Appeals for the Eighth Circuit expressed its impatience with Minnesota's behavior in the *Superior Insulating Tape* case, saying:

> "The record here also shows that the trial of this case was stayed for some four years upon plaintiff's (Minnesota) motion representing that the pending North Carolina cases would dispose of the controversy without the necessity of a trial. . . . There is reason to believe that there should be some limit to the number of times the Courts should be required to consider claims involving identical issues." (284 F.2d 478, 482.)

Needless to say, Minnesota has not abided by the outcome of the North Carolina litigation. The conduct of Minnesota with reference to the multitudinous actions it has filed in connection with its Once patent can be accurately characterized by the language of Judge Kaufman in *Helene Curtis Industries* v. *Sales Affiliates*, 105 F.Supp. 886, 902, aff'd. 199 F.2d 732 (2 Cir. 1952):

> "Defendant is forum shopping with a vengeance. I discern no other rationale which can adequately explain the stratagems which it has employed throughout this controversy. *Our courts are not meant for such use.*" (Emphasis added.)

While a final judgment completely disposing of this case will not be entered simultaneously with the filing of this opinion, for reasons set forth in the succeeding paragraph, a temporary injunction pending entry of final judgment will be filed herewith enjoining Minnesota, its attorneys, agents, and employees, from instituting any further or additional litigation against Plymouth or any of its distributors or customers based on alleged infringement of Oace Reissue Patent, No. 23,843, by Plymouth's Slipknot tape.

The final question raised by the pleadings is whether or not an attorney's fee should be awarded to Plymouth. It is clear, under 35 U.S.C.A. 285, that an attorney's fee is to be awarded only in the exceptional case. Exceptional cases, for purposes of Section 285, are those in which the conduct of the party against whom attorney fees are awarded may be characterized as unfair or vexatious or involving bad faith or some other equitable consideration which makes it unjust that the prevailing party be left to bear the burden of his own counsel fees, which prevailing litigants normally do bear. *Seismograph Service Corp.* v. *Offshore Raydist, Inc.*, 263 F.2d 5, 24 (5 Cir. 1958); *Kemart Corp.* v. *Printing Arts Research Laboratories*, 269 F.2d 375, 394 (9 Cir. 1959). Cf. *Grant Paper Box Company* v. *Russell Box Company*, 106 F. Supp. 616 (D. Mass. 1952), aff'd. 203 F.2d 177, cert. denied 346 U.S. 821, rehearing denied 346 U.S. 905.

I find and rule that the conduct of Minnesota in this case, in which it again is unsuccessfully asserting contentions rejected many times previously by other Federal courts, is both vexatious and unfair, and I award attorney fees to Plymouth. I will hear the parties on the question of the amount of attorney fees to be awarded to counsel for Plymouth.

Minnesota's counterclaim is dismissed and Plymouth will be granted relief in accordance with this opinion.

/s/ Andrew A. Caffrey,
U. S. D. J.

UNITED STATES DISTRICT COURT
District of Massachusetts

Civil Action
No. 58-1222-C

PLYMOUTH RUBBER COMPANY, INC.,
*Plaintiff*

v.

MINNESOTA MINING AND MANUFACTURING COMPANY,
*Defendant*

*TEMPORARY INJUNCTION*
March 23, 1962

Effective upon the filing hereof in the office of the Clerk of this Court and pending entry of final judgment herein, Minnesota Mining and Manufacturing Company, its officers, attorneys, agents, employees, servants, and workmen are enjoined hereby from representing that the manufacture, use, or sale of Slipknot plastic electrical tape made by Plymouth Rubber Company, Inc. is an infringement of Oace Reissue Patent, No. 23,843, and from bringing or threatening to bring, or continuing the prosecution of, any action at law or in equity, against Plymouth Rubber Company, Inc., or any of its customers, based upon the manufacture, use, or sale of said Slipknot tape by Plymouth Rubber Company, Inc. or any of its customers.

By the Court,
/s/ Dorothy C. Clark
Deputy Clerk

Enter:
/s/ Andrew A. Caffrey
Andrew A. Caffrey
U. S. District Judge

## APPENDIX B.

UNITED STATES COURT OF APPEALS
For the First Circuit

No. 6040.

THE PLYMOUTH RUBBER COMPANY, INC.,
PLAINTIFF, APPELLANT,

v.

MINNESOTA MINING AND
MANUFACTURING COMPANY,
DEFENDANT, APPELLEE.

No. 6042.

MINNESOTA MINING AND
MANUFACTURING COMPANY,
DEFENDANT, APPELLANT,

v.

THE PLYMOUTH RUBBER COMPANY, INC.,
PLAINTIFF, APPELLEE.

APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS.
[203 F. Supp. 595]

Before WOODBURY, *Chief Judge*, and HARTIGAN and ALDRICH, *Circuit Judges*.

*H. L. Kirkpatrick*, with whom *William W. Rymer* was on brief, for The Plymouth Rubber Company, Inc.

*Edward A. Haight*, with whom *John M. Harrington, Jr., Harold J. Kinney, Stanley G. De La Hunt* and *Ropes and Gray* were on brief, for Minnesota Mining and Manufacturing Company.

## OPINION OF THE COURT
July 15, 1963.

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WOODBURY, *Chief Judge*. This is another chapter in what the court below aptly called a "litany of litigation" over Reissue Patent No. 23,843 dated June 29, 1954, of original Patent No. 2,559,990 for "Insulating Tape" issued on July 10, 1951, to Oace and others and by them assigned to Minnesota Mining and Manufacturing Company, a Delaware corporation of St. Paul, Minnesota. Once ferreted out the determinative issue on these appeals becomes relatively simple. But to drive the quarry out of its burrow we must analyse the patent and review this and other litigation between the parties over it.

On August 3, 1954, Minnesota brought suit against Sears, Roebuck and Company in the Middle District of North Carolina for infringement of its reissue patent by selling insulating tape manufactured by the plaintiff-appellee herein, The Plymouth Rubber Company, Inc., a Massachusetts corporation with its principal place of business in Canton in that Commonwealth. Plymouth intervened in that suit as a party defendant and conducted the defense of its customer.[1] On the next day, August 4, 1954, Minnesota filed two similar suits, one in the Eastern District of Missouri against another Plymouth customer, which Plymouth actively defended but in which it did not formally intervene, and another in the Northern District of Illinois against Plymouth and six of its customers. Both of these suits were stayed on representations by Minnesota that the North Carolina cases would dispose of the respective controversies without the necessity for trial, and the North Carolina cases in due course went to trial. In that litigation the district court, finding the facts and making the conclusions of law tendered by Minnesota, entered a decree on June

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[1] On the same day Minnesota brought another like suit in the same court against four other Plymouth customers which was consolidated for trial with the suit against Sears in which Plymouth intervened as a defendant.

12, 1956; that its patent was valid and infringed, enjoined Sears and Plymouth from further infringement and referred the question of Minnesota's damages to a master.[2] On Plymouth's appeal the United States Court of Appeals for the Fourth Circuit reversed and remanded. *Sears, Roebuck and Company* v. *Minnesota Mining and Manufacturing Company*, 243 F.2d 136 (C.A. 4, 1957), petition for rehearing and motion to reopen denied, 249 F.2d 66 (C.A. 4, 1957), *cert. denied*, 355 U.S. 932 (1958).

The decisions of the court of appeals in the above case define the issue in the one before us. To understand those decisions, however, we must first turn to the patent itself.

The patented product is a stretchable adhesive plastic tape designed primarily for use by electricians for covering splices in electrical conductors. The problem which Oace and his assistants set out to solve, and apparently solved, was to plasticize a tape backing of polyvinyl chloride in order to make is stretchable and retractable (elastic) in such a way that it would remain in "permanent equilibrium" with a pressure-sensitive adhesive coating. The patentees say in their specification that they obtained their unique and valuable results by "utilizing an insulating tape in the form of a relatively thick but easily stretchable and highly elastic pressure-sensitive adhesive tape comprising a well-bonded, water-insoluble, non-corrosive, normally tacky and pressure-sensitive adhesive coating on a plasticized vinyl chloride polymer film which is in permanent equilibrium with the adhesive." They say that by "permanent equilibrium" they mean

[2] At this juncture Minnesota brought two more similar suits in the same court against two other Plymouth customers. These suits stayed pending appeal in the case against Sears. Upon reversal in that case, the suits were dismissed on Plymouth's motion for summary judgment. (Plymouth was, as the district court notes, "the real party conducting this defense.") *Minnesota Mining & Manufacturing Company* v. *United States Rubber Company* and *Same* v. *Goodyear Tire and Rubber Company, Inc.*, 178 F.Supp. 385 (M.D.N.C. 1959), *modified and affirmed* 279 F.2d 409 (C.A. 4, 1960).

"that the pressure-sensitive adhesive layer neither softens (becomes 'pasty') nor loses tackiness (becomes non-adherent) on prolonged contact with the backing or film layer." Then the patentees go on to say:

> "In order to secure permanent equilibrium between backing and adhesive, we employ with the vinyl chloride polymer a *combination* of modifiers including a substantial but minor amount (not to exceed about 20 parts per 100 parts of the vinyl polymer) of a *low molecular weight liquid* plasticizer such as dioctyl phthalate [or DOP] together with a substantially equal or somewhat greater amount of a *high molecular weight resinous type* plasticizer, the amount of the latter in any event being sufficient, *together with* the liquid plasticizer, to provide the desired degree of stretch in the final film." (Italics supplied.)

The patentees describe a material known to the trade as "Paraplex G-25" as "a preferred example of a suitable resinous type plasticizer." But they say:

> "While resinous or high molecular weight modifiers such as 'Paraplex G-25' are themselves capable of producing the desired degree of strength, stretch and elasticity in vinyl chloride polymer films, and furthermore are generally classed as 'non-migrating' or 'permanent' type modifiers or plasticizers, it is surprisingly found that these materials do not provide for permanent equilibrium of adhesive and backing as herein defined. Instead, it has been shown that pressure-sensitive adhesives in prolonged contact with highly stretchable and elastic films consisting solely of vinyl polymer and resinous modifier lose a great deal, if not all, of their initial tackiness or pressure-sensitivity."

Further emphasizing the necessity for the use of the two types of plasticizers, the patentees say that while the adhesive coating on a tape made from a film of the vinyl chloride polymer plus a resinous plasticizer and a liquid plasticizer in the relative proportions of

100:29.5:17.6 proved to be in "permanent equilibrium" with the backing: "On the other hand, adhesives coated on films plasticized with from 40 to 70 parts of 'Paraplex G-25' and in the absence of the dioctyl phthalate [or DOP, the low-molecular-weight liquid plasticizer mentioned above] were soon found to become deficient in tackiness."

The United States Court of Appeals for the Fourth Circuit in the case cited above construed the claims which it said were typical, that is, claim 1 of the original patent and claim 6 for its reissue, in the light of the specification as covering the use of two separate and distinct kinds of plasticizers, one liquid and the other resinous, which, the court said: ". . . are two well defined and distinctive types of plasticizers, as the language of the specification indicates, which are not only well recognized by the trade but are characterized by substantial differences in chemical composition." Then, finding that Plymouth was using only Paraplex G-40, which it said was a resinous plasticizer similar to Paraplex G-25 but less expensive, as the plasticizer for its polyvinyl chloride film, the court held that Plymouth had not infringed for the reason that even though it obtained the patentees' result it did so by omitting one element covered by the claims of the patent. Wherefore it reversed and remanded.

On Minnesota's petition for rehearing and motion to reopen on the ground of newly discovered evidence, the court of appeals wrote the second opinion cited above reiterating its previous decision that the patent taught that to manufacture the patented elastic, adhesive, insulating tape it was necessary to use both a resinous type and a liquid type plasticizer. And it rejected Minnesota's motion to reopen for the reception of evidence that the composition of Paraplex G-25 had been changed to include a larger proportion of low-molecular-weight plasticizer saying: ". . . the motion to reopen the case for the taking of additional evidence must be overruled, because even if the new evidence should demonstrate the alleged change in the composition of G-25, the de-

cision of the Court would necessarily be retained. This is so because G-25, although changed to contain a larger quantity of low molecular weights, would nevertheless be a resinous plasticizer and would not be composed partly of a resinous and partly of a liquid plasticizer in accordance with the teaching of the patent."

Upon remand the district court on May 20, 1958, issued a decree on the mandate of the court of appeals reversing and setting aside its previous decree and, with costs to the defendants, dismissed Minnesota's complaint with prejudice "for the reasons stated in the opinions and mandate and for no other reason." Elaborating, the district court said that it interpreted the opinions and mandate of the court of appeals as holding no infringement, which the court said was enough in itself to warrant dismissal of the plaintiff's complaint. Then, while commenting that it did not interpret those opinions as holding the patent invalid, the court said that interpretation "is a matter that can be left to any other court."

In the meantime, in December 1957 (or perhaps in January 1958), Plymouth changed the trade name of its tape from either "Homart" or "Plymouth" to "Slipknot" and embarked on an extensive national advertising campaign wherein it proclaimed that "After years of research and months of testing" Plymouth had "at last broken the vinyl tape barrier" with its "New Slipknot Plastic Tape," feats which Plymouth attributed to the addition of "ZF-90," which admittedly was purely an advertising "gimmick," but which it at first described as "Plymouth's new polymeric additive for total adhesion."[3] And at about the same time Plymouth moved for summary judgment in Minnesota's action pending in the Northern District

[3] The court below brushed aside Plymouth's advertising campaign characterizing it as "over-exuberant," "over-promotion" and "rather shabby huckterism." We do the same, for it affords no excuse for Minnesota's attempt to relitigate a matter already judicially determined as between it and Plymouth, as will appear hereinafter.

of Illinois mentioned earlier in this opinion. Minnesota vigorously but unsuccessfully resisted this motion and a like motion in the Missouri litigation. *Minnesota Mining and Manufacturing Company* v. *Plymouth Rubber Company, Inc.*, 178 F.Supp. 591 (N.D.Ill., 1959); *Minnesota Mining and Manufacturing Company* v. *Superior Insulating Tape Company*, 124 U.S. P.Q. 31 (E.D. Mo.), *affirmed* 284 F.2d 478 (C.A. 8, 1960).

While its petition for summary judgment was pending in Illinois, Plymouth on December 30, 1958, brought the present suit against Minnesota in the United States District Court for the District of Massachusetts for a declaratory judgment and injunctive relief.[1] Plymouth alleged in its complaint that litigation in the Fourth Circuit had culminated on May 22, 1958, in a final decree that it had not infringed Minnesota's reissue patent, that at the time of the entry of that decree an action by Minnesota for infringement of its patent was pending in the Northern District of Illinois, that although Plymouth had changed the name of its tape to "Slipknot" it had not changed the composition of its tape "in any substantial or material respect" at any time subsequent to the filing of the Illinois and North Carolina suits, but that nevertheless Minnesota ".... has now asserted in said Illinois suit, in an effort to keep that suit alive, that Plymouth has made and sold, and that its customers named in the Illinois suit have sold, subsequent to the filing of the Illinois suit, 'Slipknot' plastic electrical tape of alleged modified construction infringing said Oace patent and not adjudicated by said North Carolina decree." Wherefore Plymouth asked for a decree that its "Slipknot" tape did not infringe Minnesota's reissue patent, for an injunction forbidding Minnesota from bringing or further prosecuting any suits against Plymouth or its customers based on the manufacture,

[1] Federal jurisdiction is predicated alternatively upon involvement of the patent laws of the United States, Title 28 U.S.C. § 1338(a) or upon diversity of citizenship and amount in controversy, Title 28 U.S.C. § 1332(a)(1).

use or sale of plastic electrical tape made by Plymouth and for costs and a reasonable counsel fee.

Minnesota answered denying Plymouth's assertion that it had not changed the composition of its tape and counterclaimed for infringement, to which Plymouth replied with a denial and the assertion, *inter alia*, that Minnesota's reissue patent was invalid. Minnesota moved to strike that portion of Plymouth's reply which alleged invalidity on the ground that Plymouth was bound by a prior judicial determination that the reissue patent was valid, that is, by the adjudication of the district court in the *Sears* case, and a judge of the court below other than the judge who presided at the trial granted Minnesota's motion. Plymouth, as appellant in No. 6040, challenges the correctness of this ruling in order to protect its right to assert the defense of invalidity in the event that we should reverse the finding of non-infringement made by the court below and thereby render the question of the reissue patent's validity no longer moot.[5]

The decisions of the Court of Appeals for the Fourth Circuit in the *Sears* case determine certain issues as between the parties once and for all. Those decisions construe the patent in issue as calling for the use of two well defined and distinct types of plasticizers, one liquid and the other resinous, which the court said were not only well known and recognized in the art but were characterized by substantial differences in chemical composition.[6] It said:

> "The liquid plasticizers are all monomeric, that is, they are simple, precise and well defined chemical

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[5] "To hold a patent valid if it is not infringed is to decide a hypothetical case." *Altvater* v. *Freeman*, 319 U.S. 359, 363 (1943).

[6] On rehearing the court disposed of Minnesota's argument that the claims of the reissue patent do not call for the use of a liquid plasticizer by saying: "If these claims were taken to mean that a liquid plasticizer is not used, they are void because not supported by the teachings of the original patent."

compounds of low-molecular-weight ranging from 250 to 600. In them every molecule is like every other molecule so that the material cannot be fractionated. It is thinly fluid. DOP for example has a molecular weight of 390 and a viscosity of less than one poise, which is the unit by which viscosities are measured. Resinous plasticizers on the other hand are polymeric. They are synthetic compositions made by combining chemicals of high-molecular weight and are extremely viscous. G-25, for example, has a viscosity of 1000 poises. The molecules of these resins are combinations of varying numbers of so-called building units and accordingly vary in weight, ranging in the case of G-25 from 1000 to 50,000. Its average molecular weight is 8000. It is substantially correct to say that no part of G-25 is liquid and no part of DOP is resinous, as these terms are known to the art."

Then, finding on the record before it that Plymouth was using only a resinous type plasticizer in the fabrication of the tapes alleged to infringe, the court reached the conclusion, noted previously, that the defendants therein, Plymouth and Sears, had not infringed since one of the elements of the patented structure had been omitted in the manufacture of the accused product.

Moreover, on rehearing the court also held that even if G-25 had been changed since it first came on the market in 1944 so as to contain a larger quantity of low-molecular-weight material it would nevertheless remain "a resinous plasticizer and would not be composed partly of a resinous and partly of a liquid plasticizer in accordance with the teaching of the patent."

We presume that the basis for the court's rejection of this evidence was its conclusion that even if a resinous plasticizer contained a significant fraction of low-molecular-weight material, such fraction still would not constitute the "liquid" plasticizer of the Oace patent in the "monomeric" sense in which it had defined a "liquid" plasticizer, that is, as "simple, precise and well-defined

chemical compounds" in which "every molecule is like every other molecule." This presumption is borne out by the Fourth Circuit's repeated rejection of the same type of evidence not only in its opinion denying a rehearing in the *Sears* case but also in its opinion in the *United States Rubber* and *Goodyear* cases cited in footnote 2 above, in which the court said (279 F.2d at 414-15):

> "The molecular weights vary in both kinds of plasticizers but each has its own distinctive form, the liquid plasticizer being monomeric and the resinous plasticizer polymeric in its molecular structure, and it follows that Plymouth's tape did not violate the patent even if it be true . . . that Plymouth has found a way to make a satisfactory tape by using a resinous plasticizer containing a substantial amount of low-molecular-weight material."

In short, it has been held in prior litigation between the parties that Minnesota's reissue patent calls for the use of two types of plasticizers, a low-molecular-weight "monomeric" liquid plasticizer and a high-molecular-weight "polymeric" resinous plasticizer, and that Plymouth did not infringe by using only a resinous type plasticizer even though it might contain a substantial amount of low-molecular-weight material. Basic principles of *res judicata* and estoppel by judgment bar relitigation of these matters. As between the parties, they are settled once and for all.

This was clearly recognized by the court below which rejected the fractionation tests of Minnesota's expert witnesses by which it undertook to prove that the G-25 and G-40 in the "Slipknot" tape differed from the same compounds in Plymouth's earlier tapes in that those plasticizers had been changed to contain a substantial amount of low-molecular-weight material. It said that it did so partly because it believed Plymouth's witness who testified that the formulae for G-25 and G-40 had not been changed over the years, partly because it believed that the fractionation tests of Minnesota's witnesses did not go far enough to establish the presence

of "monomeric" material in the "Slipknot" tape[1] and partly because even if Minnesota's evidence were believed it would constitute the same sort of proof rejected by the court on petition to reopen in the *Sears* case, wherein the court said that proof of a "larger quantity of low-molecular-weights" in Plymouth's resinous plasticizers still would not make it a "liquid plasticizer" as called for by the Oace patent. Wherefore the court ruled that "Slipknot does not infringe Oace Reissue Patent, No. 23,843" and entered judgment giving Plymouth the relief it requested. Minnesota's appeal from this judgment is No. 6042.

On its appeal Minnesota contends that the court below erred because it "treated as binding on the issue of infringement an earlier decision between the same parties in the Fourth Circuit, although the article here accused was not and could not there have been involved, and is shown by the evidence herein to be different in the very respect which was pertinently involved in the Fourth Circuit's reversal of its District Court in that earlier case." Minnesota says that this is so because admissions of fact in evidence in this case "showed that there was no low molecular weight (below 1000) plasticizer in the tapes adjudicated non-infringing in the *Sears* case. On the other hand, undisputed evidence in the record here

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[1] The court said it credited the testimony of Plymouth's independent chemical expert, who said that the distillation test is a simple, reliable and objective test for the presence of liquid plasticizers in the sense of the "monomeric" materials which the court in the *Sears* case had held to be an indispensable element under the teaching of the Oace patent, and who further testified that such tests conducted by him indicated the absence of any appreciable amount of such material in Plymouth's tapes.

We have laboriously waded through Minnesota's evidence in the record, which for us as non-chemist laymen proved an odyssey fraught with obscurity, confusion and frustration. The most we can make of it is that it shows the presence of low-molecular-weight material in the plasticizer used in Plymouth's "Slipknot" tape. Indeed, this is all that Minnesota claims for its evidence in the court below or claims for it on this appeal.

shows that the tape here accused has a substantial content of liquid, low molecular weight (below 1000) plasticizer in it."

Minnesota's contention rests upon the proposition that there was no low-molecular-weight material in the Plymouth tapes held in the *Sears* case not to infringe. The fact, however, is, as we have already been at pains to point out, that the court in the *Sears* case held on Minnesota's motion to reopen, that even though G-25 had been changed since it first came on the market to contain a larger quantity of low-molecular-weights it would nevertheless still be a resinous plasticizer as defined in the patent and not a combination of resinous and liquid plasticizers within the patent's teaching. That is to say, the court held that the presence of low-molecular-weight material in G-25 and similar compounds would not render them any the less resinous plasticizers as defined in the patent.

Minnesota, in trying to show the presence of low-molecular-weight material in Plymouth's "Slipknot" tape, is simply tryng to relitigate a matter already judicially determined in prior litigation with Plymouth. Its argument, therefore, overlooks, or seeks to evade, the holding of the Court of Appeals for the Fourth Circuit in the *Sears* case. The true issue here, as the court below recognized, is not whether Plymouth is using a resinous plasticizer with low-molecular-weight material in it. In prior litigation between the parties it has been judicially determined that it can. The issue here is whether the plasticizer Plymouth is now using is a pre-blend or synthesis of liquid and resinous plasticizers as the Court of Appeals for the Fourth Circuit defined those materials.*

We cannot escape the impression that Minnesota has made no attempt to prove the issue in this case but instead is trying either to further litigate the validity

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* The court in its first opinion in the *Sears* case said that the defendants herein concede that the use of a pre-blended mixture of the two types of plasticizers would be the equivalent of mixing them during the process of production.

of the Fourth Circuit's definition of liquid and resinous plasticizers as those terms are used in the patent or else to ignore that definition on the spurious ground that the meaning of the terms used in the patent was either not directly in issue or else was not the real basis for decision in the *Sears* case. If there is one thing, however, that the *Sears* case ought to have taught Minnesota it is that the term "liquid plasticizer" as used in the patent was directly in issue and was held not to mean a resinous type plasticizer even though such a plasticizer might have low-molecular-weight material in it. There is no excuse for further litigating those issues with Plymouth.

There is no doubt in our minds that Plymouth has made out a case for an injunction in the discretion of the court below. We think it clear that Plymouth is entitled to protect its business from the adverse effects to be anticipated from the harassing of its customers with claims for damages arising out of the use of its products. "No one wishes to buy anything, if with it he must buy a law suit." *Kessler* v. *Eldred*, 206 U.S. 285, 289 (1907). But we think the injunction too broadly drawn in that it enjoins Minnesota from representing that Plymouth's "Slipknot plastic electrical tape" is an infringement of the Oace patent and from bringing any action at law or in equity based upon the manufacture, use or sale of "said Slipknot tape." Identification merely by trade name leaves Minnesota handcuffed in the event Plymouth should apply "Slipknot" to an infringing tape. The injunction should be limited to Plymouth tapes made in substantially the same way from substantially the same materials as those adjudicated non-infringing both by the Court of Appeals for the Fourth Circuit in the *Sears* case and by this court in the case at bar.

From what we have said in this opinion it must be clear that we find no abuse of discretion in awarding Plymouth a counsel fee.

***Judgment will be entered dismissing Plymouth's appeal, No. 6040.***

***In Minnesota's appeal, No. 6042, judgment will be entered affirming the judgment of the District Court as modified in accordance with this opinion.***

## APPENDIX C.

UNITED STATES COURT OF APPEALS
For The First Circuit

No. 6042.

MINNESOTA MINING AND MANUFACTURING COMPANY,
Defendant, Appellant,

v.

THE PLYMOUTH RUBBER COMPANY, INC.,
Plaintiff, Appellee.

JUDGMENT
July 15, 1963.

This cause came on to be heard on appeal from the United States District Court for the District of Massachusetts, and was argued by counsel.

Upon consideration whereof, It is now here ordered, adjudged and decreed as follows: The judgment of the District Court, as modified in accordance with the opinion filed today, is affirmed, and the case is remanded for such modification.

By the Court:
/s/ Roger A. Stinchfield,
Clerk

[cc: Messrs. Haight and Kirkpatrick.]

## APPENDIX D.

UNITED STATES COURT OF APPEALS
For The First Circuit

No. 6040.

THE PLYMOUTH RUBBER COMPANY, INC.,
Plaintiff, Appellant,

v.

MINNESOTA MINING AND MANUFACTURING COMPANY,
Defendant, Appellee.

### JUDGMENT
July 15, 1963.

This cause came on to be heard on appeal from the United States District Court for the District of Massachusetts, and was argued by counsel.

Upon consideration whereof, It is now here ordered, adjudged and decreed as follows: The appeal herein is dismissed. No costs.

By the Court:
/s/ Roger A. Stinchfield,
Clerk

[cc: Messrs. Kirkpatrick and Haight.]

## APPENDIX E.

UNITED STATES COURT OF APPEALS
For The First Circuit

No. 6042.

MINNESOTA MINING AND MANUFACTURING COMPANY,
Defendant, Appellant,

v.

THE PLYMOUTH RUBBER COMPANY, INC.,
Plaintiff, Appellee.

ORDER OF COURT
August 5, 1963

It is ordered that the petition for rehearing filed on July 29, 1963, be, and the same hereby is, denied.

By the Court:
Roger A. Stinchfield, Clerk.
By: /s/ Dana H. Gallup,
Chief Deputy Clerk.

[cc: Messrs. Haight and Kirkpatrick.]